



**TERMS.**

Cash with order, or C. O. D. on receipt of 25 per cent. of the amount of the purchase to guarantee transportation charges. Remit by Bank Draft, Post Office Money Order, or Express Money Order. Do not send personal check unless certified. Goods delivered F. O. B. Orange, N. J. No charge for boxing or cartage.

Machines are sold outright, with no territorial restrictions. We do not lease machines. We do not ship machines on approval.

All Edison apparatus is warranted to be superior in workmanship, and only the best materials are used in their manufacture.

We do not deal in second-hand machines. We do not take old machines in exchange or trade.

Always state how shipment is to be made; by freight or express, giving the route in either case. Remember that it takes three or four times as long for goods to reach destination if shipped by freight, and also that the cost of an express shipment is three to five times greater than a freight shipment.

Order by catalogue number and letter K. In telegraphing, use the Code Words.

**CAUTION.**

Edison Kinetoscopes, Projecting Kinetoscopes and Films are covered by U. S. Patents No. 493,246, dated March 14th, 1893; No. 589,168, dated August 31st, 1897 (re-issued September 30, 1902, No. 12,037 and 12,038 and January 12, 1904, No. 12,192); No. 688,648 and No. 688,649, dated December 10, 1901, and No. 711,845, dated December 2, 1902. The public is warned against purchasing or exhibiting apparatus of any other make.

Form No. 210. 5-2-04.

## EDISON Projecting Kinetoscopes

This Catalogue  
supersedes Catalogues  
Nos. 164 and 166

Manufactured by  
EDISON MFG. CO.  
ORANGE, N. J.

### INTRODUCTION.

The first Kinetoscope was devised by Mr. Edison in 1887. It was a ponderous affair, costing several hundred dollars. Briefly described it was a box with a peep-hole at the top. With this machine, owing to mechanical limitations, only one person at a time could enjoy the moving pictures. It was Mr. Edison's idea to devise an instrument that should do for the eye what the Phonograph does for the ear, and the Projecting Kinetoscope as now perfected illustrates the successful working out of that idea.

Edison Projecting Kinetoscopes of to-day represent the very highest development in the art of photography; that of bringing before the eye an exact life-size reproduction of life motion, with all its accompanying effects of light, shade and expression. By means of a transparent picture film, an intense light, and proper arrangement of lenses, the pictures are projected upon a screen one after another, in such rapid succession that the eye cannot perceive any intermission between them, thus producing a perfect illusion of continuous action. Edison Projecting Kinetoscopes also enlarge the scenes and figures to full life size and illuminate them brilliantly. They do these things simply and perfectly. They are built to stand wear. They will outlast any machine made by unreliable people.

Edison Projecting Kinetoscopes have grown rapidly in popular favor. They amuse and they teach. They combine profitable instruction with delightful entertainment. The list of Edison Films now at the disposal of buyers covers a wide variety of topics.

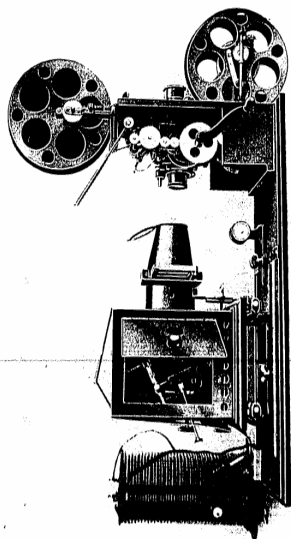
### EDISON PROJECTING KINETOSCOPES.

Edison Projecting Kinetoscopes are made in two styles: The Exhibition model and the Universal model. Each is a perfect motion picture machine in every respect.

The Exhibition model is much larger than the Universal. It is also more rigid, is equipped with ten inch reels that hold from 1000 to 1200 feet of film, while the Universal reels are eight inches in diameter and accommodate only 700 feet. Much better quality objective lenses are furnished with the Exhibition model, and the mechanism is enclosed in an oak cabinet, while the Universal mechanism is not, it being attached to a support casting. The work done by each machine combines accuracy with brilliant results. Each machine is equipped with a stereopticon attachment for showing standard size lantern slides, the lamp illuminating the motion pictures serving also for the slides.

The essential advantages of these machines are: Extreme completeness, compactness, portability, simplicity, accuracy, ability to project steady and brilliant pictures, and reduction of injury to films. They can be operated without any previous knowledge of the art. Both use the standard Edison films which have been adopted as standard the world over.

Their mechanism, and, in fact, their entire construction is so simple that any one, after reading the printed instructions, may set up and operate them.



Edison Exhibition Projecting Kinetoscope.

# **EDISON PROJECTING KINETOSCOPE. EXHIBITION MODEL.**

**Price, \$115.00.**

Catalogue No. K 15000. Code word *Unfiddle*.

Net weight complete, 71½ lbs.; without Rheostat 55½ lbs. gross weight, 100 lbs.; Dimensions when set up ready for operation: Length, 3 feet 9 inches; width, 11 inches; height, 16 inches. Dimensions of packing case: 24½ x 12½ x 22 inches.

## **Equipment.**

Hand power mechanism in Quartered Oak Cabinet.	Russian Iron Cone and Slide Carrier Frame.
Reel Hanger with Rewinding Crank, Gear and Reel Shaft with Pinion.	Double Slide Carrier.
Take-up Device.	Extra Quality Condensing Lens.
Two 10 inch reels.	No. 2 Objective Lens for motion pictures.
Large Base Board, with Clamp Casting complete.	Stereopticon Attachment including No. 2A Objective Lens.
Lamp House complete, with Lamp House Brackets.	Knife Switch for Electric Current and connection from Lamp to Rheostat.
Are Lamp and Base.	Adjustable Rheostat for 52 or 104 volts alternating current, or 110.
Eccentric Holder Post for Calcium Burners.	120 volts direct current.

## **Exhibition Model without Take-up Device.**

**Price \$105.00**

Catalogue No. K 15001. Code word *Unarrowed*.

## **Exhibition Model without Stereopticon Attachment.**

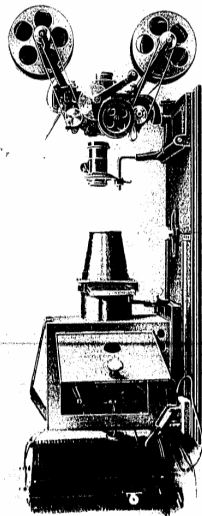
**Price \$105.00**

Catalogue No. K 15002. Code word *Unmissed*.

## **Exhibition Model without Take-up Device and Stereopticon Attachment.**

**Price \$90.00**

Catalogue No. K 15003. Code word *Unmissed*.



Cut K 4. Edison Universal Projecting Kinetoscope.

#### EDISON PROJECTING KINETOSCOPE. UNIVERSAL MODEL.

Price \$75.00.

Catalogue No. K 14500. Code word *Usaba*.

Net weight, 45 lbs.; without Rheostat, 29 lbs. gross weight, 90 lbs. Dimensions when set up ready for operation: Length 29 inches; width 11 inches; height 14 inches. Dimensions of packing case: 35 x 15 x 22 inches. Sold only in two ways.

##### Equipment.

Hand power mechanism with Base Casting and Sliding Device.  
Take-up Device and Reel Hanger.  
Two Inch Reels.  
Two Spring Steel Belts for Driving Reels.  
Large Base Board with Clamp Casting complete.  
Lamp House complete.  
Arc Lamp and Base.  
Excitric Holder Post for Calcium Burners.  
Kussle Trip for Camera and Slide Carrier Frame.  
Double Slide Carrier.

Extra Quality Condensing Lens.  
No. 1 Objective Lens.  
Stereopticon Attachment, including casting for holding half size objectives, adapter for holding quarter size Objective and No. 1A Objective Lens.  
Knife Switch for Electric Current and connections from Lamp to Rheostat.  
Adjustable Rheostat for 52 or 110-volts alternating current, or 110-120 volts direct current.

#### Universal Model Motion Picture Mechanism. Price \$50.00.

Catalogue No. K 11000. Code word *Usable*.

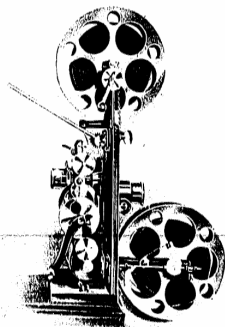
##### Equipment.

Hand power mechanism with base casting and sliding device.  
Take up Device and Reel Hanger.  
2 eight inch Reels.  
2 Spring Steel Belts for Driving Reels.

No. 1 Objective Lens.  
Stereopticon Attachment, including casting for holding half size objectives, and adapter for quarter size objectives but without Objective Lens.

### THE MECHANISM.

Edison Projecting Kinetoscopes are equipped with improved reels and a perfect take-up device for reeling film. They are also equipped with a triple sprocket gearing. The top sprocket is used to feed the film from the upper reel, after forming a loop, into the framing device. The middle sprocket is intermittent, bringing the film to the

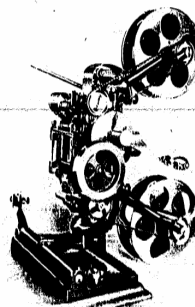


Cut Pk 10. Showing Mechanism of Edison Exhibition Kinetoscope.

point of exposure, and stopping it for the fraction of a second required for exposure. The lower sprocket is only to keep the lower loop and feed the film into the take-up device. By running a loop before it reaches the middle sprocket, the

pull and friction on the film is obviated, thus prolonging its life. In other words, about five or six inches of film only is being brought down by the middle, or intermittent sprocket, the top sprocket, which runs continuously, doing all the work of feeding the film into the framing device.

The top reel is set in a bracket (or reel hanger) which is clamped to the top of the mechanism on the Universal model and top of cabinet on Exhibition model. It is equipped with a winding crank for the rapid rewinding of the film from the take-up reel on the Exhibition Model. On the Universal Model, the upper rewinding attachment is arranged so that the film can be run backward or forward as desired. It is equipped with a pulley and spring belt similar



Cut Uk 5. Showing Mechanism of Edison Universal Kinetoscope.

to the take-up attachment. If customers prefer the reel hanger fitted with rewinding crank and gear, we furnish it, but unless specified, Universal machines are supplied with the attachment for running the film backwards through the machine.

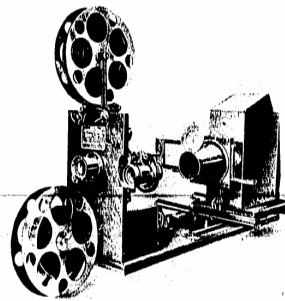
The framing device is operated by a simple lever attachment, which enables an operator to instantly adjust the film in the correct position before the framing plate in rear of the projecting lens.

The Take up Device automatically winds up the film after it has been exhibited. That on the Exhibition model consists of a reel suitably geared to the machine, with an adjustable friction device that causes the film to be wound tightly on the reel, without any pull on the sprockets. The Take up Device on the Universal model is operated by a spiral spring belt. These Take up Devices are a great improvement over the old method of running the film into a bag or box. They avoid kinks, snarls and a possibility of fire. This is a great convenience to an operator, as it keeps the film always free from dust, dirt and unnecessary friction, all of which will cause scratches. After the film has been wound on take up reel, it can be re-wound on the top reel in a very short time. The Take up Devices are easily detachable for convenience in packing.

#### STEREOPTICON ATTACHMENT.

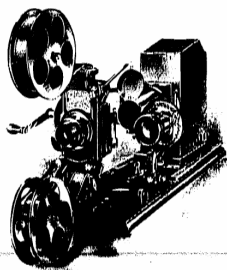
The Stereopticon Attachment consists of a stereopticon objective lens, and an adjustable rod device by means of which the attachment is fastened to the Kinetoscope. The same condensing lens serves for both the Stereopticon Attachment and Kinetoscope. The objective lens is of extra quality and especially selected so that it gives a field on the screen about the same size as the field given by the Projecting Kinetoscope lens. The

lens is mounted in a ring casting which slides forward and back on the adjustable rod device. The forward and back movement of the lens on the sliding rod, together with the focusing screw of the lens, permits ample focal adjustment. The entire Stereopticon attachment is very easily detached for convenience in packing. The Stereopticon side of the machine can be used independently of the animated picture side for showing lantern slides. The combination of both Kinetoscope and Stereopticon in one machine is an important fea-



Cut Plk 17. Showing Stereopticon Attachment of Edison Exhibition Kinetoscope. This, especially at both ends, can be operated by one person. It will often be found convenient to have slides containing the announcements, with a brief description of next film to be shown, and to throw such an announcement upon the screen before each film is run.

The new double slide carrier enables the exhibitor to operate both slides and moving pictures from one side of machine. A slide is put in place while moving pictures are shown. When the film is ended the lamp house is immediately centered on the stereopticon lens by moving the mechanism of the Universal Projecting Kinetoscope toward the operator, or the lamp house of the



Cut UK D. Showing position of Stereopticon Attachment on Edison Universal Kinetoscope

Exhibition Projecting Kinetoscope away from the operator, and the slide picture is instantly flashed upon the screen. While one slide is shown, another can be placed in the empty end of the carrier, for an instantaneous change of pictures. It is made to carry the regular size of lantern slides, 3½ x 4 inches, which can be purchased from any good lantern supply house in the country. Hand power is used in operating the machine.

The film moving mechanism is simple, and requires only a steady wrist movement to run it.

#### THE FILM.

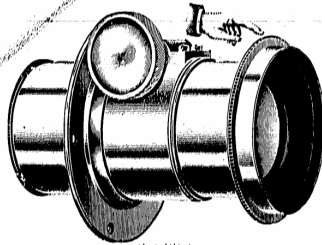
The picture film is a long strip of celluloid, one and three-eighths of an inch in width and of various lengths, according to the subject. Each photograph is three-quarters of an inch long by one inch wide. The edges of the film are perforated, to pass over the sprocket device carrying the film in front of an intense light and the objective lens which projects the picture upon the screen; thus both magnifying and illuminating the photograph. This film is operated only on the Projecting Kinetoscope and cannot be used in the Stereopticon attachment.

#### OBJECTIVE LENSES.

The Objective Lenses, with which the Edison Exhibition Projecting Kinetoscope is equipped, are wide angle lenses which give a field 11½ x 15 feet at a distance of 70 feet from the screen, or a 3 foot picture for every 14 feet of distance. Those furnished with the Universal Projecting Kinetoscope are special wide angle lenses, giving a field of 11½ x 15 feet at a distance of 50 feet from the screen, or a 3 foot picture for every 10 feet of distance. We also furnish objective lenses that will project pictures 3 feet wide at 20 feet larger in proportion. These are sold as extras. (See prices list on page 34.)

The Universal Adjustable Objective is a new lens for moving picture work. It is a lens which will project a large or small moving picture, and of any size between the two extremes, without changing the location of the machine or making any change in the focus of the objective.





Cut PK 1.  
Shows the Universal Adjustable Objective Lens.

This lens resembles in appearance the ordinary objective and projects a maximum picture whose width is equal to about one third of the distance from the curtain to the instrument, and a minimum picture whose width is equal to about one-fourth of the distance. These sizes and all sizes between can be projected from one position. This is accomplished by a peculiar combination of lenses in the objective. A focus is obtained in the ordinary way, by means of the milled screw head. The size of the picture is varied by turning the head of the objective, indicated by the hand. The picture always remains in focus after the adjustment. The Universal Adjustable Objective will project different size pictures at different distances.

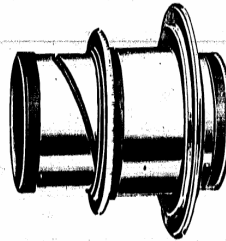
DISTANCE	SIZE OF PICTURE
20 feet	Between 1 and 2 feet
30 "	2 1/2 " 10 "
40 "	10 " 14 "
50 "	14 " 17 "
60 "	17 " 20 "
80 "	20 " 26 "

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Illustrating the use of this lens: Assuming that a motion picture machine has been placed at a distance of 50 feet from the curtain, which is 15 feet square. On making his first trial the operator focuses his objective and finds that his picture is too large for the curtain. He then reduces it to the exact size of his curtain merely by revolving the front ring of the objective, which controls the inner combination of lenses. Changes in size of picture can be accomplished while the machine is in operation.

#### THE No. 1 MOVING PICTURE OBJECTIVE.

The objectives that usually accompany projecting machines project a life-size picture at a long distance, and too small a view at short distances. This is due to the fact that individual pictures on a motion picture film are very small and even a high power objective requires a long distance to enlarge the view to life-size. The ordinary motion picture objective projects a view



Cut PK 3.  
Shows No. 1 Moving Picture Objective Lens.

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whose entire disc equals about one-fifth of the distance; a 10 foot disc at 50 feet, 15 at 75 feet, etc. To make an objective which would project equally large pictures at lesser distances has been a difficult task, but we believe that the problem has been satisfactorily solved with our No. 1 Motion Picture Objective.

This lens is of high magnifying power and projects an illuminated disc whose size equals about one third of the distance. The following table will demonstrate its approximate capacity:

DISTANCE FROM CERTAIN	SIZE OF MOTION PICTURES
23 feet	7 feet
33 "	10 "
48 "	14 "
68 "	20 "

The higher the power of an objective, the more delicate must be the focusing. A slight variation in position of the lenses will throw the view out of focus. The usual rack and pinion not being considered delicate enough for fine adjustment of this lens, we have adopted an entirely new method, which allows of the slightest variation in position of the lenses, is rigid and completely under the control of the operator. This feature lies in a spiral groove cut into the inner tube of the lens, in which plays a steel screw; milled flange fastened to the inner tube causes it to revolve when turned by the operator, and at the same time the screw working in the spiral causes the tube containing the lenses to play backward and forward.

This lens is furnished with every Universal machine.

The condensing lens is of the finest quality and is especially selected to secure the clear definition so necessary in a perfect projecting machine.

In ordering condensing lenses (glasses) only, state whether the glass wanted is the one next to the light or the one furthest away.

The Stereopticon Objective Lens is most carefully selected to insure perfect harmony between the stereopticon and motion pictures.

#### OBJECTIVE LENS COMBINATIONS.

We list below a combination of motion picture and stereopticon objective lenses for obtaining nearly the same size views at different distances.

**No. 1.** Challenge motion picture objective, size of picture 3 feet for every 10 feet of distance.

**No. 2.** Middle distance moving picture objective. Projects a picture 3 feet for every 14 feet of distance.

**No. 3.** Long distance moving picture objective. Projects a picture 3 feet for every 20 feet of distance.

#### Stereopticon Objective Lenses.

**No. 1A.** Projects a view, size 3 feet for every 10 feet of distance.

**No. 2A.** Projects a view 3 feet for every 14 feet of distance.

**No. 3A.** Projects a view 3 feet for every 20 feet of distance.

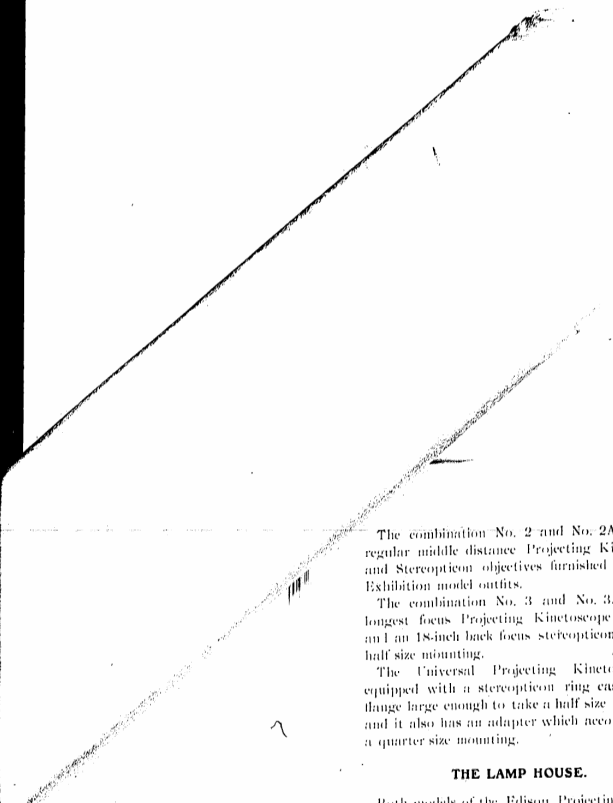
We also supply the following extra lens.

**No. 1AA.** This is a regular half size objective lens, standard size for stereopticon pictures, giving the same size picture as 1A, but is of better quality.

See price list on page 11.

#### Explanation of Above.

The combination No. 1 and No. 1A are the regular Projecting Kinetoscope and Stereopticon Objective lenses furnished with complete Universal Projecting Kinetoscope outfits.



The combination No. 2 and No. 2A are the regular middle distance Projecting Kinetoscope and Stereopticon objectives furnished with our Exhibition model outfits.

The combination No. 3 and No. 3A are the longest focus Projecting Kinetoscope objective and an 18-inch back focus stereopticon lens in a half size mounting.

The Universal Projecting Kinetoscope is equipped with a stereopticon ring casting and flange large enough to take a half size mounting, and it also has an adapter which accommodates a quarter size mounting.

#### THE LAMP HOUSE.

Both models of the Edison Projecting Kinetoscope are equipped with the same style lamp house, the only difference being in the method of mounting it on the base board. This Lamp House is the most complete device of its kind ever put on the market. The Exhibition model lamp house is mounted on castings  $2\frac{1}{2}$  inches in height, has a forward and back adjustment of 6 inches and a side adjustment of 5 inches for the stereopticon attachment. The Universal Lamp House is set on the large baseboard between two guide strips and has a forward and back adjustment of 6 inches but no side adjustment as the mechanism of this machine slides back and forth to show both moving pictures and lantern slides. The Lamp House opens from the right side and rear, thus allowing an exhibitor to get at the lamp very readily. The only window in the side door permits inspection of the light at all times, without opening the door, or injury to the operator's eyes.

The interior of the Lamp House is planned for every illuminant known to moving picture and stereopticon exhibitors; including electric arc light (both direct and alternating), oxy-hydrogen or lime light burners, and saturators. The arc light being undoubtedly preferable (especially in sections where electric current can be obtained), all lamp houses are equipped especially for the arc light. (The different gas burners mentioned above are sold as extras.) The base on which the arc light is mounted has a forward and back adjustment of  $2\frac{1}{4}$  inches, operated by a fibre hand wheel, enabling the operator at all times to obtain instantly and keep the proper distance between the light and the condensing lens.

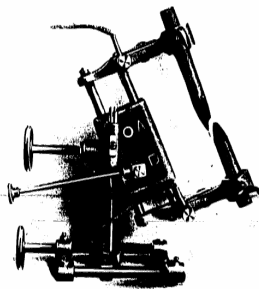
#### THE ARC LAMP.

The Arc Lamp is the most complete and handiest lamp of its kind. The same style lamp is furnished with both machines. This lamp is designed for either alternating or direct current. It has an up and down adjustment of  $1\frac{1}{4}$  inches, which, together with the forward and back adjustment of the base, enables the exhibitor to keep his light completely under control.

The carbon holders accommodate carbons varying from  $\frac{1}{4}$  to  $\frac{3}{8}$  inches in thickness. We specially recommend a  $\frac{3}{8}$  inch special cored carbon for animated picture work. This extra size carbon gives a much more satisfactory light than the small carbons and it is also more economical.  $\frac{3}{8}$  inch carbons will burn one hour without re-setting.

The lamp is constructed for use with both alternating and direct currents. When direct current is used, the gear shift should be inserted in the hole (10). It will then feed the upper carbon

twice as fast as the lower when inserted in the hole (A). This is because the upper carbon is consumed twice as fast as the lower one when direct current is used. When alternating current is used the gear shaft should be inserted in the hole (A). It will then feed both carbons alike. This is because both carbons are consumed alike when alternating current is used. The lever is operated through an opening in the rear door. All the other adjustments can be made while both lamp house doors are closed.



Cut PK 11.

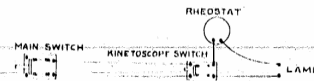
Showing side view of Arc Lamp.

An eccentric holder post (for accommodating carbon and gas/oxygen burners) is furnished with every complete machine. It is a simple, yet complete adjusting device.

### THE LIGHT.

Electric light is the best, as it is the most intense. Either the 110-120 volt direct current or the 52 or 104 volt alternating current can be used, 25 to 30 amperes giving best results.

A rheostat is furnished with every complete outfit, the use of which, together with the wiring and operation of the Edison Projecting Arc Lamp, is fully described in "Directions for Operating" which accompany every Edison Projecting Kinetoscope. The rheostat is wound with special German silver high resistance wire and has a maximum capacity of 40 amperes. The operator has only to move the sliding adjustment up or down to regulate completely the above three currents, which are the only electric circuits ordinarily encountered. *We recommend the use of two rheostats wired in multiple when alternating current is used.*



Cut PK 21. Showing one Rheostat connected with lamp.



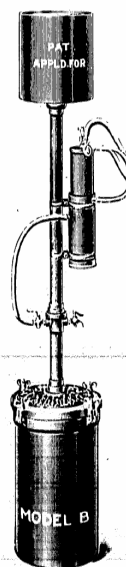
Cut PK 22. Showing two Rheostats connected in multiple.

Calcium (or oxy-hydrogen) light is a very intense illuminant, and in past years has found great favor with magic lantern owners as a convenient, clear and intense light for showing up pictures. The calcium light has recommended itself because the oxygen and hydrogen gases (in cylinders) are so easily obtainable.

In nearly every large city in the United States there are calcium light companies who supply hydrogen and oxygen gases in iron cylinders. These cylinders may be shipped by express. This is a very satisfactory light when the electric current is not available. The gas-oxygen light a very powerful illuminant and one of the best substitutes for the electric light. It is safe and its operation is simple. By its use a light of 1000 candle power can be obtained without any hissing or roaring. No complex construction, easy to operate, and economical. Certain it is that this light opens up new territory to exhibitors. The outfit is easily carried as bag, gage, compact in form, light weight and can be transported with little extra trouble. The outfit for making the light consists of an oxygen generating outfit and a saturator and burner. The jet burns upon a lime pencil, producing a very brilliant light.

We recommend the gas-oxygen light particularly. Our gas generating outfits are offered at very reasonable prices. See price list page 25. By referring to the numbered cut PK21 on page 27 the simplicity of each outfit is apparent. Outfit No. 28 is the same as outfit No. 27 with the addition of a compressor, a twenty five foot cylinder and gauge attachment.

#### THE OXYLITH GAS-MAKING OUTFIT. A New Outfit Which Generates Gases for Lime Light.



The Oxylith gas-making outfit was invented as a natural sequence to the production of a compound by a French chemist, which produces oxygen when it touches water, without the application of heat. The outfit consists of two parts:

1. THE OXYGEN GENERATING APPARATUS.
2. THE SATURATOR, OR APPARATUS used to replace the hydrogen tank.

The oxygen apparatus consists, as shown in illustration, of a lower tank, which contains a cage into which the oxylith, or chemical is placed, a standpipe and upper vessel serve to hold the water supply and give the requisite pressure.

To prepare the apparatus for an exhibition, the lower vessel (which is placed upon the floor) is partly filled with water. The cage, which is not visible in illustration, receives a box of the chemical oxylith, is then placed in position, and the cover clamped. A quantity of water is poured in at the top.

and runs through the pipe to the bottom, raising the level of the water which it previously contained. As soon as this touches the oxylich contained in the cage, pure oxygen is generated.

This is held between the water level and the top of the lower vessel, the column of water serving to give about two pounds pressure. As an entire compartment is only 15 inches in height, and 9 inches in diameter, and part of it is filled with water when gas is being used, it will be seen that at no time is there a large volume of gas present.

When the gas is being consumed, and the pressure lightened, the water column forces the water to a higher level, where it again comes in contact with oxylich, generates more gas; whose volume lowers the water level and forces it back through the pipe into the upper vessel. This process continues until the entire volume of oxylich has been exhausted. When the gas is not being used generation ceases.

The saturator is attached to the standpipe, and its contents saturated with sulphuric ether. The gas is led from the valve shown in the lower section of the pipe to the burner, giving pure oxygen. The other stopcock of the burner is connected by rubber tubing to the valve at the top of the saturator, which then feeds Ether oxygen.

The oxygen produced by this means is over 99 per cent. pure; that bought in tanks is usually 80 per cent. pure.

The light is as bright as when obtained from gases taken from gas tanks under high pressure. Although the maximum pressure of the gases contained in the American gas tanks is 224 pounds, the pressure actually required at the burner tip is less than one pound.

We can unreservedly recommend this outfit, because we consider it extremely practical. Its compactness when packed for carriage and light weight offer a great advantage over the heavier and bulkier types of gas making outfit.

The running expenses are about the same as the cost of gases bought in tanks, and economy is not claimed for it, at the present price of oxylich. The chemical is imported from France, and the inventor upholds the price, to which duty and carriage must be added.

The dimensions and weight of the outfit are as follows: Height when set up, from floor, to top of water supply vessel, 44 inches; height of oxygen compartment, 15 inches; diameter of oxygen compartment, 9 inches.

The dimensions of the carrying case which holds the complete outfit, including saturator, when packed for carriage, are 10x10x24 inches. Total weight of outfit, packed in case, 35 pounds. When the burner which we supply with this outfit is used, one box of oxylich will generate sufficient gas to last one and three quarter hours.

#### **DYNAMIC HIGH POWER CALCIUM LIGHT BURNER.**

This lime light burner has the highest efficiency of any calcium light burner on the market, and is particularly well adapted for the projection of moving pictures. At the best, calcium light is not as powerful as the electric arc, and any feature that adds to the candle power of a lime light burner is highly desirable.

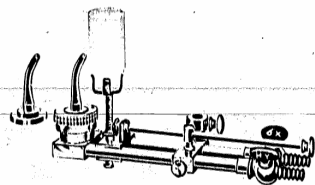
The mixing chamber of the "Dynamic" burner, that is to say the compartment in which the two gases meet and mix, is very much larger than in the ordinary type of burner and is so constructed

that the gases mix thoroughly before they reach the tip of the burner.

This burner is provided with two goose necks having different sizes of bore; one of these is  $1/16$  inch and the other  $1/12$  inch in diameter; they are interchangeable.

When exhibitors desire the highest degree of illumination, the large bore is used with a fine cylinder  $1 1/4$  inches in diameter. The fine cup of the "Dynamic" burner is of the standard size to take  $3/4$  inch or  $7/8$  inch lines; the lines that are  $1 1/4$  inches in diameter are reduced at the bottom to fit this fine cup.

When using the large bore the consumption of



gas runs from 8 to 10 feet per hour. In this case gases should be taken from the gas companies' cylinders which usually contain 50 feet of gas under high pressure. It is not advisable to use the large bore goose neck with the Oxylite or other gas making outfits, as the heavy consumption of gas would be expensive and the pressure would be hardly sufficient. When the burner is used with a gas making outfit the smaller bore tip should be placed in the burner.

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Actual photometric tests demonstrate that the "Dynamic" burner produces 1100 C. P. when gases are taken from tanks at the rate of 8 to 10 feet per hour, using  $1 1/4$  inch lines. Ordinary standard line light burners produce 600 C. P. with a consumption of 6 feet of gas per hour and the use of small lines.

#### FILM WINDER.

The film winder is an ingenious little apparatus, (shown in cut PK 20) is small and compact and can be placed on any table or shelf that may be near the projecting machine, being provided with thumb screw for instantly adjusting it to a table. This is for use in winding up films not over 250 ft. in length. Exhibitors who have to make changes in their programmes weekly will find this a very useful addition to their outfits. To wind up film the end is placed in the groove of the winding shaft, with the emulsion side in, and by turning the crank of the winder a 100 foot film can be properly wound in less than ten seconds of time. There is an attachment on the winder for removing the film from the shaft after it has been wound, in perfect safety and in a perfect roll.

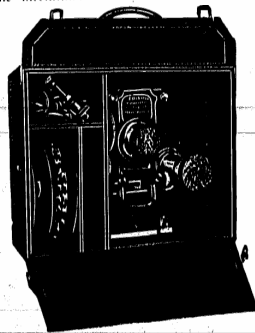
This attachment consists of a nickel plated disc about the diameter of a 150 foot film when rolled up. This disc slides from front to back of the shaft. After the film is wound, the exhibitor takes the disc from back to front, carrying the coil of film with it, thus freeing it from the shaft.



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### CARRYING CASE FOR UNIVERSAL KINETOSCOPE MECHANISM.

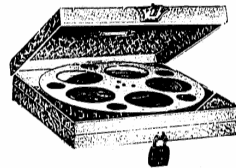
The case has compartments for the mechanism proper with supporting base and stereopticon attachment, upper reel and support, take-up device, objectives and one extra reel. It is equipped with a carrying handle, hinged front door with top flap, and strong catches at top and sides of door. The dimensions are 16x12x8½ inches. Such parts of the Universal machine as the large base board, lamp house, rheostats and lamp can be packed in a trunk or large dress suit case, but as the mechanism should receive every care,



Unit F.K. 1 shows Carrying Case with Mechanism in place. Especially when traveling, it is advisable to use the carrying case for this portion of the outfit and carry it as baggage. (See picture.)

### REEL CASES.

These cases are made of metal, japanned, and are



Unit F.K. 2. Shows Reel Case with Film in place, provided with carrying handle, lock and key. We furnish them in two sizes for the Universal reels. One holds one reel and the other two. Those furnished for exhibition reels hold one reel. We do not furnish cases to hold 2 Exhibition reels. (See picture.)

### SCREENS

The best possible screen is a clean white plaster of paris wall. The next best is a screen made of stoutest cotton tacked tightly and smoothly over a light wooden frame, and given two coats of Ealsomine or gelatine and whiting. Woonsocket shooting also makes a good screen.

We give herewith a list of screens which we furnish especially adapted for moving picture and stereopticon work. The prices do not include frames, cyclots or guy ropes, but simply the plain back board.

Price	Size	Unit No.	Color	Warrant
11.00	50	111-11	Universal	
11.00	50	111-12	Universal	
11.00	50	111-13	Universal	
11.00	50	111-14	Universal	
11.00	50	111-15	Universal	
11.00	50	111-16	Universal	
11.00	50	111-17	Universal	
11.00	50	111-18	Universal	
11.00	50	111-19	Universal	
11.00	50	111-20	Universal	



#### FILMS AND COLORING.

To counteract the effect of cheap films, duplicates, worthless subjects and short length films that are being offered in the market, we are listing our *Genuine Edison Films* in two classes. Some of our subjects cost us large sums of money to obtain, while others are procured at a nominal cost. Therefore, the films of inexpensive subjects we shall list as Class B at the net price of 12 cents per foot. Those of the newer subjects and more expensive to secure will remain at 15 cents per foot.

Remember these are manufacturers' prices and the best materials are guaranteed. The quality of Class B films is precisely the same as Class A. The above prices are strictly net. There are no discounts.

The coloring of films adds wonderfully to their effectiveness. We have improved our coloring processes both in quality and rapidity and are now prepared to furnish in appropriate tints all films that are suitable for coloring. Special quotations furnished on coloring.

Remember there are various kinds of coloring and color artists but we guarantee perfect work and perfect color combinations.

#### GENERAL INFORMATION.

All Edison Projecting Kinetoscopes complete are equipped with electric light attachments and are ready to be used. Most travelling exhibitors have in their halls where they can be procured about 100 feet of film. In the summer season, however, it is better to have a large stock of film on hand to meet the demand for it. The cost of each foot of film is 12 cents for Class B and 15 cents for Class A.

burner in addition to the electric light attachments. If on the other hand an exhibitor intends travelling in small villages located at a distance from cities where gas can be procured and there is danger of the gases being delayed in transit and not arriving in time for entertainments, such exhibitors should purchase one of the gas making outfits listed in this catalogue. With Gas-Oxygen outfit No. 28 listed on page 34 a 25 foot cylinder and compressor is furnished. With these, oxygen gas can be generated and stand under pressure during leisure time, and used as desired. The saturator is filled with either 90 gasolene or methylated ether and takes the place of hydrogen. If our Oxygith light outfit is used, the oxygen gas must be generated as it is being used. This is the simplest and cheapest gas making outfit on the market and the light it gives is nearly equal to that given by the Oxy Hydrogen light.

Our films range in length from 25 to 2100 feet. It takes one minute to project a 50 foot trip of film on the screen at the proper speed to give the picture the appearance of natural life motion. From this information exhibitors may estimate the cost of an outfit necessary for the length and class of entertainment they intend giving. Most exhibitors use lantern slides containing the title of each film and project these before showing each subject. The slide can be left in the machine from 10 to 15 seconds, and in this way the amount of film required for an entertainment is reduced considerably. Ordinary glass can be used for a lantern slide, but we use the best. Names of the films are written on the back of each slide in black ink. The cost of each slide is 8 to 10 cents.

**GASO-OXYGEN LIGHT.**

The following chemicals will suffice for 2 hours continuous running. 2 lbs. chlorate of potash, 1/2 lb. black manganese, 1/4 lb. methyl ether and 1 lime.

**PRICE LIST OF CHEMICALS (ADDITIONAL).**

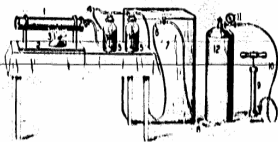
	PRICE	CAT. NO.	CODE WORD
Chlorate of Potash, per lb.	80.25	K15118	Unfaded
Black Manganese, per lb.	20	K15119	Unfaded
Special Limes, per doz.	1.00	K15120	Unfaded
Methylated Ether, in one lb. cans, per lb.	1.25	K15121	Unfaded
Limes in sealed brass tubes, per dozen	1.25	K14488	Vanguard
Extra large limes, 1 1/2" dia. meter, per dozen	1.50	K14489	Vanguard

**OUTFIT No. 27.**

**For Generating Oxygen Gas (into bag only)**  
**Price \$45.00**

Catalogue No. K 14500. Code Word *Unfaded*.  
(CHEMICALS NOT INCLUDED)

1 Russia iron retort and cleaner, 3 1/2" x 18"	87.00	K15100	Unexposed
1 Retort stand	3.00	K15101	Unextended
1 Burner gas or spirit, specify which in ordering	2.00	K15102	Unextended
16 inches lined tubing from retort to purifier	25	K15103	Unfaded



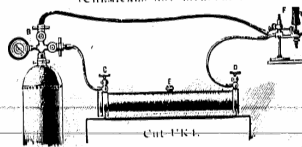
OUTFIT No. 27. Shows complete outfit.

1 Purifier, 15" dia. stoppered glass jar of tubes, 6 ft. 1 1/2" diameter tubing, 10 ft. 1 1/2" dia. tubing.

1 55 Gallon gas bag, stoppered and regulator, 25.00 K15106 *Unfaded*  
5 ft. 1 1/2" dia. rubber tubing, 1.00 K15107 *Unfaded*  
Net. Wt. of complete outfit, 23 lbs. Gross wt. packed in special box (no extra charge), 45 lbs.

PRICE CAT. NO. CODE WORD

Gas-oxygen Saturator & Burner, 30.00 K14510 *Unfaded*  
Outfit No. 27 complete with Saturator and Burner, 75.00 K14511 *Unfaded*  
(CHEMICALS NOT INCLUDED)



Showing connections between Gas Tank, Saturator and Burner of Gas-oxygen outfit No. 28.

**OUTFIT No. 28**

**For Generating and Compressing Oxygen Gas in Cylinders.**  
**Price \$94.00**

Catalogue No. K 14512. Code Word *Unfaded*

The first six items are the same in outfit No. 27, as

In outfit No. 27	18.00	K14510	Unfaded
1 55 gallon gas bag and double stopcock	25.00	K15106	Unfaded
5 feet 3 1/2" dia. rubber tubing from gas bag to pump	1.20	K15111	Unfaded
1 Compressor	15.00	K15112	Unfaded
1 ft. tubing and couplings, compressor to cylinder	2.00	K15113	Unfaded
1 Gauge attachment, regulator and hose for tubing to bags	12.00	K15114	Unfaded
1 Twenty five foot cylinder and key	20.00	K15115	Unfaded

Net wt. of complete outfit, \$2 lbs. Gross wt. packed  
in special box (no extra charge), 85 lbs.

Gas-Oxygen Saturator &  
Burner and 12 ft. tubing, 30.00 K14510 *Unfrack*  
Outfit No. 28 complete with  
Saturator and Burner, 124.50 K14513 *Unfracking*

**OXYLITH GAS-MAKING OUTFIT.**  
**PRICE, \$39.50.**

Cat. No. K14466. Code Word, *Vanadene*.

Includes saturator, wrench, tongs, funnel, and com-  
plete instructions without chemicals.

Oxylith Oxygen compound

(24 cakes in sealed can) \$1.25 K14467 *Vanadene*  
(Either is recommended because it can be obtained in  
any well-stocked drug store. 100% gasoline can be used  
but is obtained with difficulty.)

**DYNAMIC HIGH POWER CALCIUM  
LIGHT BURNER.**  
**PRICE, \$15.00.**

Cat. No. K14487. Code Word, *Vanessa*

Includes two interchangeable goose necks,  $\frac{1}{16}$  inch  
and  $\frac{1}{32}$  inch respectively.

**PARTS AND SUPPLIES FOR EXHIBITION  
AND UNIVERSAL MODEL PROJECTING  
KINETOSCOPES.**

(See following pages for parts and supplies applicable to  
either machine only.)

Universal Special Allied  
able Objective Lens, 20.00 K15057 *Unken*  
Objective Lens No. 1, 7.00 K14400 *Unkasaken*  
Objective Lens No. 2, 10.00 K14401 *Unkened*  
Objective Lens No. 3, 10.00 K14402 *Unkened*  
Stereopticon Objective  
Lens No. 1, 7.00 K14403 *Unkened*  
Stereopticon Objective  
Lens No. 2, 10.00 K14404 *Unkened*  
Stereopticon Objective  
Lens No. 3, 10.00 K14405 *Unkened*

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**Stereopticon Objective**

Lens No. 1AA, 14.50 K14406 *Unkened*

(See page 17 for combinations of these lenses.)

Lamp House (only), 2.50 K14402 *Unkened*

Arc Lamp with Base, 10.00 K15000 *Unkened*

Arc Lamp Base, 2.50 K14472 *Unkened*

Carbon Holders for Arc  
Lamp (2) each, .35 K14466 *Unkened*

Carbon Holder Arms, upper, .45 K14467 *Unkened*

Carbon Holder Arms, lower, .40 K14468 *Unkened*

Carbon Clamps (2), .15 K14468 *Unkened*

Carbon Holder binding  
post thumb screws (2), .15 K14469 *Unkened*

Carbon Holder Clamp  
screw Insulating bush-  
ings (2), .05 K14470 *Unkened*

Carbon Holder Insulat-  
ing bushing washer, .05 K14471 *Unkened*

Carbon Holder Insulat-  
ing bushing mica  
washers (2), .05 K14472 *Unkened*

Carbon Holder clamp  
screw mica washers (2), .05 K14473 *Unkened*

Carbon Holder Insulat-  
ors (2), .05 K14474 *Unkened*

Arc Lamp Gear Shaft  
Clamp Nut, .25 K14469 *Unkened*

Arc Lamp Gear Shaft  
Handle, .20 K14470 *Unkened*

Arc Lamp Gear Shaft  
Handle Coupling, .15 K14471 *Unkened*

Rheostat, 10.00 K15050 *Unkened*

Film, White, 1.50 K15020 *Unkened*

Black Film, Perforated  
for Spooling, per B. roll, .10 K15011 *Unkened*

Film Mender, 7.50 K15012 *Unkened*

Film Cement, per bottle, .25 K15013 *Unkened*

Imported Carbons, for  
Lamp (extra quality),  
 $\frac{1}{2}$  or  $\frac{3}{4}$  inch, per box, 4.00 K15014 *Unkened*

Condensing Lens com-  
plete (front and rear  
glass and shell), 6.00 K15007 *Unkened*

Condensing Lens (front  
glass only), 2.00 K14408 *Unkened*

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Condensing Lens (rear glass only).....	2.00	K15009	Unfigured
Cone and Bracket.....	2.00	K14458	Unstriek
Double Slide Carrier.....	.90	K14473	Untrude
Connecting Cords long (2) each.....	.40	K15055	Untruded
Connecting Cord short.....	.20	K15056	Unforgiven
Cone Bracket Clamp Screw.....	.15	K14459	Unhaste
Cone Bracket Clamp Screw Washer.....	.05	K14460	Unhutton

**PARTS AND SUPPLIES FOR EDISON  
EXHIBITION PROJECTING  
KINETOSCOPE ONLY.**

	PRICE	CAT. NO.	COLOR	WORD
Take-up Device.....	\$15.00	K15001	Unfastened	
Stereopticon Attachment.....	12.00	K15005	Unfasten	
Carrying Case for complete machine.....	10.00	K15021	Unforgot	
Reels, 10 inch.....	1.00	K15053	Unfooted	
Reel Shaft and Pinion.....	.50	K15061	Unhollow	
Reel Hanger with rewind ing gear and crank.....	2.00	K15054	Unhosen	
Upper Sprockets.....	3.00	K15033	Unhollow	
Upper Sprocket Shafts with Pinions.....	10	K15035	Unhollow	
Upper Rubber Tension Roller.....	.50	K15036	Unhollow	
Upper Rubber Tension Roller Shaft.....	10	K15062	Unhollow	
Upper Rubber Roller Ten sion Spring.....	10	K14475	Unhollow	
Screws (2).....	.05	K14476	Unhollow	
Upper Rubber Tension Roller Bracket.....	.25	K15063	Unhollow	
Body Slides, right.....	1.25	K15051	Unhollow	
Body Slides, left.....	1.25	K15052	Unhollow	
Frame Side, right.....	2.00	K15064	Unhollow	
Frame Side, left.....	2.00	K15065	Unhollow	
Frame Side, cup.....	.75	K15066	Unhollow	
Sprocket Set Screw each.....	.05	K15067	Unhollow	
Picture Hanger.....	.50	K15050	Unhollow	
Picture Hanger Bracket.....	.30	K15068	Unhollow	
Cranks.....	1.00	K15026	Unhollow	

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Large Driving Gear.....	1.00	K15080	Unfigured
First Intermediate Pinion with Shafts.....	.30	K15031	Unfilled
Second Intermediate Pin ions.....	.20	K15032	Unfilled
Large Intermediate Gears.....	.50	K15033	Unfilled
Cam Shaft with Cam and Large Bevel Gear Assembled.....	4.00	K15037	Unfilled
Cam.....	1.75	K15038	Unfilled
Cam Shaft.....	.80	K15069	Unfilled
Plain Bushings (2) each.....	.25	K15041	Unfilled
Large Bevel Gear.....	1.25	K15039	Unfilled
Small Bevel Gear with Shaft.....	.75	K15042	Unfilled
Revolving Shutter.....	.90	K15043	Unfilled
Intermittent Sprocket and Star Wheel Assembled on Shaft.....	6.00	K15044	Unfilled
Intermittent Sprocket.....	3.00	K15015	Unfilled
Star Wheels.....	2.00	K15016	Unfilled
Eccentric Bushings (2) each.....	.25	K15017	Unfilled
Film Gate complete with Intermittent Sprocket Tension Roller, Tension Roller Springs, Guide Roller, Guide, Flanges and Shaft Assembled.....	5.15	K15070	Unfilled
Film Tension Springs (2) each.....	.25	K15071	Unfilled
Film Tension Spring Screws (2) each.....	.05	K15072	Unfilled
Guide Roller for Film Gate.....	.20	K15073	Unfilled
Guide Roller Flanges (2) each.....	.25	K15074	Unfilled
Guide Roller Shaft.....	10	K15075	Unfilled
Intermittent Sprocket Rubber Tension Roller with Shaft.....	60	K15019	Unfilled
Intermittent Sprocket Rubber Roller Tension Springs (2) each.....	10	K15076	Unfilled
Take-up Frame (Long Casting).....	2.50	K15077	Unfilled

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Take up Driving Gear Bracket.....	.75	K14478	Valdulos
Take up Frame Side (left).....	.75	K14477	Valdulos
Take up Driving Gear.....	.50	K15078	Valoradu
Take up Sprocket.....	3.00	K15079	Valoradus
Take up Sprocket Shaft with Pulley.....	.40	K15080	Valoradus
Take up Rubber Tension Roller.....	.50	K15081	Valoran
Take up Rubber Tension Roller Bracket.....	.35	K15082	Valoraran
Take up Rubber Tension Roller Shaft.....	.40	K15083	Valoraso
Lamp House Slide (front).....	.50	K15084	Valoratus
Lamp House Slide (rear).....	.50	K15085	Valoratush
Lamp House Bracket.....	2.00	K15086	Valon
Lamp House Slide Rods (2) each.....	.50	K15087	Valpout
Lamp House Baseboard.....	.50	K15088	Valreep
Large Baseboard with Hinges only.....	1.00	K15089	Valrais
Film Idler Pulley and Bracket to attach to Baseboard complete.....	1.25	K15090	Valson
Single Reel Case (left).....	1.50	K15091	Valstun
Mechanism Cabinet.....	3.50	K15092	Valstun

#### PARTS AND SUPPLIES FOR EDISON UNIVERSAL PROJECTING KINETOSCOPE ONLY.

Stereopticon Attachment only, includes one No. 1A Objective Lens, Support Rod, Ring Casting for built size Objective and Adapter for quarter size Objective.....	\$10.00	K11600	Valtore
Clamp screws for stereopticon support rod (2).....	.40	K11480	Valdula
Reels, 8 inch.....	.80	K11487	Valstale
Reel Shaft and pulley.....	.90	K11490	Valstare
Reel Hammer, including Hairs and support rollers revolving on and gear.....	.75	K11491	Valstare
Reel hanger, assembled with reel shaft, reel shaft pulley and clutch.....	1.00	K11494	Valstare

Reel Driving Belts.....	.50	K14421	Ushership
Mechanism Base complete, with Horizontal Slide Rod.....	2.00	K14427	Uslpi
Mechanism Slide.....	1.25	K14428	Ustuberis
Mechanism Support Cast- ing.....	2.00	K14429	Ustuhor
Mechanism Slide Rods (2) each.....	.25	K14430	Ustoken
Upper Sprocket.....	3.00	K14431	Ustuehangh
Upper Sprocket Shaft.....	.20	K14437	Ustuedum
Upper Sprocket Shaft Gear and Pulley.....	1.25	K14438	Ustules
Upper Rubber Tension Roller and Bracket Assembly.....	.95	K14440	Ustules
Upper Rubber Tension Roller.....	.50	K14441	Ustutor
Upper Rubber Tension Roller Shaft.....	.40	K14442	Ustutor
Upper Rubber Tension Roller Bracket.....	.35	K14443	Ustutor
Upper Rubber Roller Tension Spring.....	.40	K14444	Ustutelles
Sprocket Set Screws.....	.05	K14442	Ustutelles
Pictograph.....	.05	K14420	Ustutelles
Pictograph Bracket.....	.30	K14432	Ustutelles
Upper Film Guard.....	.35	K14433	Ustutelles
Crank.....	1.00	K11433	Ustutelles
Driving Gear.....	1.00	K11434	Ustutelles
Lower Intermediate Pin- ion.....	.20	K11435	Ustutelles
Upper Intermediate Pin- ion.....	.20	K11435	Ustutelles
Cam Shaft, assembled with Cam and Large Reel Gear.....	1.00	K11441	Ustutelles
Cam.....	.75	K11445	Ustutelles
Cam Shaft.....	.50	K11446	Ustutelles
Cam Shaft Pinion.....	.50	K11453	Ustutelles
Cam Shaft Bushing Pin.....	.50	K11450	Ustutelles
Camshaft Bushing Pin.....	.50	K11451	Ustutelles
Large Reel Gear.....	1.25	K11443	Ustutelles
Small Reel Gear.....	.75	K11444	Ustutelles
Revolving Shorties.....	.90	K11490	Ustutelles
Intermittent, sprocket shaft with sprocket and 80 to 90 to 1 Assembly.....	6.00	K11490	Ustutelles
Intermittent, sprocket.....	1.00	K11444	Ustutelles

Star Wheel.....	2.00	K14475	Valenpire
Reeccentric Bushings, each.....	.25	K14476	Valvola
Flm Gate (only).....	.75	K14400	Vscudama
Flm Tension Springs (2) each.....	.25	K14412	Vstlessly
Flm Tension Spring Screws (2) each.....	.05	K14413	Vsenorla
Upper Guide Roller.....	.20	K14414	Vseques
Upper Guide Roller Flanges (2) each.....	.25	K14415	Vsevole
Upper Guide Roller Shaft.....	.10	K14416	Vshasa
Lower Guide Flanges with Shaft.....	.40	K14417	Vsherance
Lower Guide Flange Shaft Tension Springs, each.....	.10	K14418	Vsherdom
Lower Guide Flange Shaft Tension Spring Screws (2) each.....	.05	K14419	Vshered
Take up Attachment Bracket assembled with shaft and pulley.....	1.00	K14422	Vsincorum
Lower Flm Guard.....	.15	K14423	Vsignuola
Take up Driving Gears.....	.50	K14424	Vslinge
Take up Sprocket Gear.....	3.00	K14425	Vsine
Take up Sprocket Shaft.....	.20	K14452	Vsolvorum
Take up Sprocket Shaft Gear and Pulley Assembly.....	1.25	K14453	Valentia
Lower Rubber Tension Roller and Bracket Assembled.....	1.10	K14455	Vaband
Lower Rubber Tension Roller.....	.50	K14456	Vambred
Lower Rubber Tension Roller Shaft.....	.10	K14481	Vandyking
Lower Rubber Tension Roller Bracket.....	.35	K14457	Vamotte
Lower Rubber Roller Tension Spring.....	.10	K14485	Vanelus
Lower Rubber Roller Tension Spring Screws (2).....	.05	K14486	Vanesio
Com Bracket Base.....	.30	K14491	Vampars
Lamp House Baseboard.....	.50	K14493	Vamplate
Lamp House Baseboard with Clamp.....	1.50	K14491	Vamplers
Lamp House Baseboard Clamp Casting.....	.20	K14495	Vambantum
Carrying Case for Universal Mechanism.....	1.00	K14521	Vantecimo
Single Reel Case (m.c.).....	1.50	K14522	Vantico
Double Reel Case (m.c.).....	2.00	K14523	Vantico

